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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,814	04/14/2004	Tsutomu Okada	17614	5629

23389 7590 10/16/2008

SCULLY SCOTT MURPHY & PRESSER, PC
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER
HUPCZEY, JR, RONALD JAMES

ART UNIT	PAPER NUMBER
3739	

MAIL DATE	DELIVERY MODE
10/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/823,814	OKADA, TSUTOMU	
	Examiner	Art Unit	
	RONALD J. HUPCZEY, JR.	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 7-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 7-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendments and arguments, received on June 3rd, 2008, have been fully considered by the examiner. Currently, claims 1 and 7-10 are pending with claim 1 standing as amended. Applicant's amendment to claim 1 has obviated the rejection under 35 USC § 112, second paragraph. The following is a complete response to the June 3rd , 2008 communication.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokai (Pub. No. 4-329944) in view of Rexroth et al (hereinafter "Rexroth")(US Pat. No. 4,943,290).

Regarding claim 1, Kokai discloses a radio knife (electrosurgical device **1**) containing an electrically insulating sheath (insulating flexible tube **2**) having one flow channel inside (see channel in Figure 1), a distal end portion and a proximal end portion, the distal end portion of the sheath having a distal opening (tip opening **13**) and an axis, a support member (stopper member **4**) which closes the distal opening of the sheath (see Figure 4), the support member having a slide hole with a diameter than that of the distal opening extending along the axis thereof (see Figure 4); an operating wire (operation wire **14**) axially moveable in the sheath (see paragraph [0013], lines 4-6), The rod-shaped portion being passed through the slide hole for axial projection and retraction (movement represented by **X**, see Figure 5); a control section (operation part **3**, operation handle **15**) which is provided on the proximal end portion of the sheath (see Figure 5) and controls the operating wire to project an retract the electrode portion in the axial

direction (see paragraph [0013], lines 8-14), the control section having a high-frequency current supply portion (see paragraph [0010], lines 6-8) which supplies high-frequency current to the electrode portion (see paragraph [0011], lines 9-12); a liquid feed portion (cock **17**) which is provided on the proximal end side of the sheath and feeds liquid through the one flow channel inside the sheath towards the distal opening (see paragraph [0014]); and an opening for liquid feed which is formed in the support member, the opening being arranged around the slide hole (see paragraph [0014], line 3-5), communicating to the one flow channel (see Figure 1 and paragraph [0014]) and partially blocking flow in the vicinity of the distal end portion (see Figure 1). Kokai fails to discloses the inclusion of a plurality of openings arranged around and independently of the slide hole and is silent in regard to the conductivity properties of the support member.

Rexroth discloses an electrosurgical device (electrosurgical apparatus **10**) containing an electrically insulating sheath (duct means **70**, see col. 9; 3-5) having a distal end portion and proximal end portion, the distal end portion of the sheath having a distal opening and an axis (see Figure 4). Rexroth further discloses the insulation sheath to inherently form a support member which closes the distal opening of the sheath and is insulating. The insulating tip defines a slide hole for the rod-shaped electrode shaft (electrode shaft **50**), the slide hole having a diameter smaller than that of the distal opening (see Figure 14). Additionally, Rexroth discloses the device to have a liquid feed portion (input fluid port **18**) and a plurality of openings (see openings, Figure 6) for liquid feed (see col. 8; 62 – col. 9; 8) arranged around and independently of the slide hole (see Figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a plurality of openings such as those disclosed by

Rexroth in conjunction with the device disclosed by Kokai to provide an electrosurgical device with a plurality of openings arranged around and independently of the slide hold. As disclosed by Rexroth, it is old and well known to provide a plurality of openings for liquid to flow from in order to create a superior flow pattern to the proximity of the electrode tip. Furthermore, it would have been obvious to provide for an electrically insulative support member as discloses by Rexroth to the device of Kokai to prevent the short circuiting of the device.

Regarding claim 7, Kokai discloses the sheath to have an extending portion extending ahead of the support member wherein the extending portion has an internal space which stores the electrode portion (see Figure 5).

Regarding claim 8, Kokai fails to disclose an extending portion location on the distal end portion of the rod-shaped portion and extending across the extending direction of the rod-shaped portion and for the extending portion to be a hooked bent portion extending substantially at right angles to the distal end portion. Rexroth discloses the electrode portion (electrode shaft **50**) to contain an extending portion (ball tip **26**) located on the distal end portion of the rod-shaped portion and extending across the extending direction of the rod-shaped portion (see Figure 15). Rexroth further discloses the extending portion to be a hooked bent portion (electrode tip **26C**) extending at substantially right angles to the distal end portion (see Figure 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Kokai with the electrode tip designs disclosed by Rexroth in order to catch tissue around the extending portion.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kokai (Pub. No. 4-329944) in view of Rexroth et al (US Pat. No. 4,943,290) as applied to claim 8 above, and further in view of Kittur et al (US Pat. No. 5,846,241).

Both Kokai and Rexroth fail to disclose the inclusion of a plate-like electrode at the distal end portion. Kittur et al discloses a radio knife (electrocautery device **10**) containing an extending portion (moveable head **22**) in a plate-like arrangement (second electrode **24**) coupled to the distal end of the rod-shaped portion (second wire **20**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a plate-like electrode as disclosed by Kittur et al to the joint device of Kokai and Rexroth. All three device disclosed are directed toward the same field of endeavor and the utilization of a plate-like electrode would increase the versatility of the device, effectively allowing it to successfully perform a wider variety of treatments.

Response to Arguments

5. Applicant's arguments filed June 3rd, 2008 have been fully considered but they are not persuasive.

Applicant argues that the objective of the radio knife claim 1 can only be achieved by a device comprising "only one flow channel". Applicant further notes that the disclosure of Rexroth provides for three flow channels.

In response to applicant's argument, the examiner agrees with applicant in the matter that the disclosure of Rexroth fails to provide for the limitation of "only one flow channel" providing fluid flow. However, examiner points to the disclosure of Kokai. Kokai clearly provides for the limitation of "only one flow channel" as the above rejection states. Furthermore, it is the

examiner's intention as stated in the above rejection, that the disclosure of Rexroth teaches the modification of the support member (stopper member **4**) of Kokai to include a plurality of openings arranged around and independently of the slide hole in order to achieve a superior flow pattern to the proximity of the electrode tip and not the examiner's intention to provide the three channels and plurality of openings as disclosed by Rexroth. The combined device of Kokai in view of Rexroth provides for the limitation of a plurality of openings communicating with "only one flow channel".

Applicant argues that the opening (second end **72D**) and the disclosure of Rexroth fail to provide for a plurality of openings for liquid feed communicating to the only one flow channel, and partially blocking flow of the liquid fed in the vicinity of the distal end portion by a liquid feed portion as clearly recited in claim 1.

In response to applicant's argument, the examiner respectfully disagrees. Examiner draws applicant's attention to the disclosure of Rexroth, namely column 8, line 66 – column 9, 3 in which it is clearly disclosed that a plurality of openings provides for "…a superior flow pattern of the non-conductive fluid ... to the electrode tip …". This disclosure clearly teaches the inclusion of a plurality of openings for liquid feed communicating to the only one flow channel, and partially blocking flow of the liquid fed in the vicinity of the distal end portion by a liquid feed portion and teaches that it is preferable to have a plurality of openings over a single opening. Furthermore, the modification of the support member (stopper member **4**) of Kokai with the plurality of openings of Rexroth clearly shows the communication of the plurality of openings with only one flow channel.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONALD J. HUPCZEY, JR. whose telephone number is (571)270-5534. The examiner can normally be reached on Mon. - Fri. from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. J. H./
Examiner, Art Unit 3739

/Michael Peffley/
Primary Examiner, Art Unit 3739

RJH